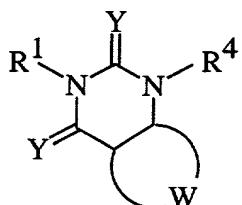


ABSTRACT

Selective MMP-13 inhibitors are fused pyrimidinones of the formula

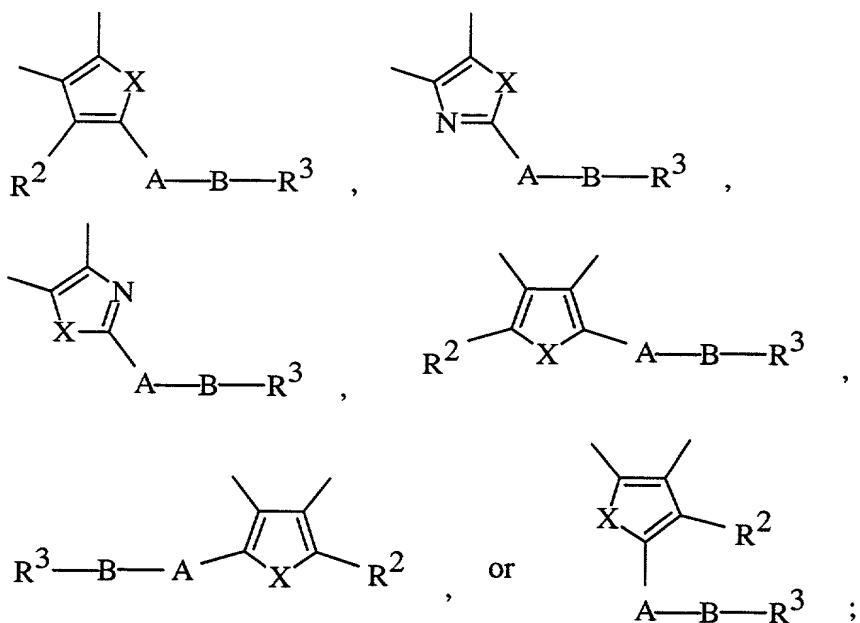


or a pharmaceutically acceptable salt thereof,

5

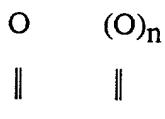
wherein:

W, together with the carbon atoms to which it is attached, form a 5-membered ring diradical



X is O, S, SO, SO<sub>2</sub>, NR<sup>5</sup>, or CH<sub>2</sub>;

10



A is -C- or -S-;

B is O or NR<sup>5</sup>; or

A and B are taken together to form -C≡C-;

R<sup>1</sup>, R<sup>4</sup>, and R<sup>5</sup> are hydrogen, alkyl, alkenyl, alkynyl, (CH<sub>2</sub>)<sub>n</sub> aryl, (CH<sub>2</sub>)<sub>n</sub> cycloalkyl, C<sub>1</sub>-C<sub>6</sub> alkanoyl, or (CH<sub>2</sub>)<sub>n</sub> heteroaryl;

R<sup>2</sup> and R<sup>3</sup> are hydrogen, alkyl, alkenyl, alkynyl CN, NO<sub>2</sub>, NR<sup>4</sup>R<sup>5</sup>, (CH<sub>2</sub>)<sub>n</sub> cycloalkyl, (CH<sub>2</sub>)<sub>n</sub> aryl, or (CH<sub>2</sub>)<sub>n</sub> heteroaryl;

5 R<sup>2</sup> may further be halo;

n is an integer of from 0 to 5; and

R<sup>4</sup> and R<sup>5</sup> when taken together with a nitrogen to which they are both attached complete a 3- to 8-membered ring containing carbon atoms and optionally containing O, S, or N, and substituted or unsubstituted;

10 with the proviso that R<sup>1</sup> and R<sup>3</sup> are not both selected from hydrogen and C<sub>1</sub>-C<sub>6</sub> alkyl.